

15. The blocked isocyanate group-containing resin composition according to claim 1, wherein the monohydric alcohol (B) containing no hetero atom is an aliphatic alcohol having 6 to 15 carbon atoms.

REMARKS/ARGUMENTS

This is a full and timely response to the non-final Office Action dated January 7, 2003. Reexamination and reconsideration are courteously requested.

The present amendment cancels claims 5 to 6, and incorporates their features, in the alternative sense, into claim 1. New claim 15 is added. Thus, claims 1 to 4, and 7 to 15 are currently pending for the Examiner's consideration.

In the Action, the Examiner objected to claim 6, asserting that the claim is broader in scope than claim 1, from which claim 6 depends. Accordingly, the Examiner asserts that the claim is not compliant with 37 C.F.R. § 1.75(c) which requires dependent claims to add limitations to the independent claims. This objection is overcome by way of the present amendment, which makes claim 1 recite that (B) has 5 to 18 (not 8) carbon atoms. Basis for this amendment is found in the specification at page 13, lines 14 to 15, and in the claims as originally filed.

The Examiner also rejected claims 3 and 14 under 35 U.S.C. § 112, second paragraph as being indefinite. The Examiner asserts that claim 3 recites a "polyisocyanate compound (a)" without sufficient antecedent basis. This rejection is traversed, and it is respectfully pointed out that antecedent basis may be found in claim 2, line 4 (claim 3 depends from claim 2). The Examiner also asserts that claim 14 should indicate whether the recited ratio is a mole:mole ratio or a weight:weight ratio. In response, claim 14 is amended to recite that the ratio is a weight:weight ratio. Basis for this amendment may be found on page 21, lines 25 to 26.

Applicants thank the Examiner for the apparent acknowledgement that claim 4 includes allowable subject matter.

The Examiner rejected claims 1 to 2, 5 to 12, and 14 under 35 U.S.C. § 102(b) as being anticipated by, or alternatively, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,126,424 ("Brindöpke"). This rejection is respectfully traversed in view of the claims as originally filed.

Brindöpke discloses in Example 1 (col. 12, lines 20 to 34) that a resin that would read on the present resin (A)(I) is prepared by blocking hexamethylene diisocyanate using dibutyl malonate. See also col. 3, line 53 for the use of compounds that are larger than dibutyl malonate. However, in order to reach the present claim 1, the blocked resin of Brindöpke would need to be reacted with a monohydric alcohol. The Examiner appears to ignore this point. In fact, glycol compounds are co-reacted with the blocked resin, and there is no teaching or suggestion in the reference of a monohydric alcohol being reacted with the blocked resin in the cited reference. The Examiner points to col. 8, line 21 of Brindöpke for a teaching that the blocked resin is mixed and/or reacted with a binder (B) which must be a polyol compound. However, it appears that the Examiner makes this point in reference to present claims 12 to 14, and not with regard to a reaction with a monohydric alcohol, and since a polyol compound has more -OH groups than a monohydric alcohol by definition, it is clear that Brindöpke fails to teach or suggest the blocked isocyanate group-containing resin of the present invention.

Claims 1 to 3, and 5 to 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by, or alternatively, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,274,693 (Poth"). Poth teaches that a resin (B1) is prepared by blocking a di- or polyisocyanate, such as hexamethylene diisocyanate (col. 11, line 60 to col. 12, line 14) using diisopropyl malonate. Poth also teaches that a resin (B2) that is prepared by reacting 2-butanol to a compound having an exposed and available isocyanate compound. Referring to the latter passage in Poth, as well as column 8, lines 25 to 42, the product from this reaction is reacted with a hydroxyl-containing compound, which may be a monohydric alcohol such as n-butanol. The major difference between Poth and the present invention is that Poth prefers the use of polyols over monohydric alcohols, although Poth apparently mentions of a monohydric alcohol as one option. Also, Poth teaches that the purpose for adding the alcohol is to react any free isocyanate groups (col. 8, line 47 to col. 9, line 16), while the present claims recite that the monohydric alcohol is to replace an R group in formulae (I) and (II) claim 1.

Further, claim 1 is amended to recite the features of claims 5 and 6, in the alternative sense. In other words, claim 1 as amended recites that the monohydric alcohol (B) is either a substituent having 5 to 18 carbon atoms containing no hetero atom (from claim 5), or is one or more of two of the groups of compounds originally listed in claim 6. Although Poth teaches that the alcohol is preferably a compound having more than two carbon atoms, the largest monohydric alcohol disclosed by Poth is n-butanol which has only 4 carbon atoms. Consequently, it is clear that Poth fails to teach or suggest the features of the presently claimed invention.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: April 7, 2003

Respectfully submitted,



By David K. Benson

Registration No.: 42,314

RADER, FISHMAN & GRAUER PLLC

1233 20th Street, N.W.

Suite 501

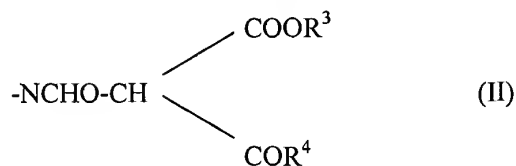
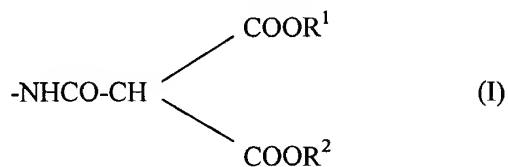
Washington, DC 20036

(703) 955-3750

Attorneys for Applicant

Version With Markings to Show Changes Made

1. (amended) A blocked isocyanate group-containing resin composition, comprising a resin (C) obtainable by modifying a resin (A) having, in one molecule, two or more blocked isocyanate groups represented by formula (I) or (II):



[([where[in] R^1 , R^2 , R^3 , and R^4 , which are same or different, each represents a substituent having 1 to 10 carbon atoms])],

with a monohydric alcohol (B), where either (B) is one or more compounds selected from the group consisting of mono (or oligo)propylene glycol monoalkyl ethers having 4 to 10 carbon atoms, and mono (or oligo)ethylene glycol monoalkyl ethers having 4 to 10 carbon atoms, or (B) is represented by formula (III):



[([where[in] R^5 represents a substituent having [3 to 8] 5 to 18 carbon atoms])],

replacing at least one of the R^1 , R^2 , and R^3 with the R^5 ;

wherein the resin (C) has a lowered solubility parameter as compared with the resin.

14. (amended) The thermosetting composition according to claim 12, wherein the using weight:weight ratio of the resin (C) to the polyol (D) is from 1:0.5 to 1:20 based on both components.

15. (new) The blocked isocyanate group-containing resin composition according to claim 1, wherein the monohydric alcohol (B) containing no hetero atom is an aliphatic alcohol having 6 to 15 carbon atoms.